# Pseudocode

USER LOTTERY NUMBERS

HashSet<Integer> nums;

FOR x in range(0,6):

Display("Enter the number\n>>>")

num = userinput

while num < lottery\_min or num > lottery\_max:

Display("INVALID INPUT!!!")

Displau("Enter the number\n>>>")

num = userinput

nums.add(num);

GENERATED LOTTERY NUMBERS

HashSet<Integer> lottery

int matching = 0;

for x in range(0,6):

rnum = (generate random number(min,max);

lottery.add(rnum)

RANGE SETTER

Display("Enter the lower boundary for the range\n>>>")

*lottery\_min* = userinput

Display("Enter the upper boundary for the range\n>>>");

*lottery\_max* = userinput

Display("1. Play the Lottery")

Display(“2. Set Lottery range")

Display("3. Quit\n>>>")

CLASS DESIGN

Class:Lottery

Fields: Min, max

Methods: Main, FindWinner

TEST DATA

|  |  |  |  |
| --- | --- | --- | --- |
| **Test Description** | **Test Data** | **Expected result** | **Worked?** |
| Input lotto numbers | Nums = 1,2,3,4,5,6, | Lotto numbers set to what user enters | Y |
| Lets 3 users enter numbers | Enter numbers 6 times for each user | Allows 3 users to choose lotto numbers | Y |
| Let user set range | Min = 1  Max = 0 | Sets range of lotto numbers to what user inputs | Y |
| Menu input for running lotto | 1 | Menu option 1, playing the lotto should run | Y |
| Menu input for setting range | 2 | Menu option 2, setting the range should run | Y |

# Introduction

The problem to be solved with this project is to create a program which can run a lottery. The program must allow for users to choose their lotto numbers and must generate numbers for the lottery.

## Requirements

In terms of the requirements, the program met the basic requirements. It was lacking in good design concerning the requirement of having multiple users and could be implemented more efficiently. The multiple user requirement in the program is a fixed number set at 3. The program is lacking more in the optional requirements. It did meet the requirement to allow users to set the range however the set class was not implemented for the more complex operations. The program also allows the user to run the lotto for multiple weeks.

EVALUATION

This weeks lab, I felt went rather smoothly. It wasn’t due to difficulty that I couldn’t get all the requirements met but more due to time as I neglected spending as much time as was required to do so. In terms of problems, the only thing which was difficult was figuring out hoe to compare values in the sets. Another problem was that the program isn’t very efficient in how it runs for multiple users.